

among the youngest societies in the developed world. Further efforts are required to reduce the substantial CHF burden.

#### PHS102

##### WILL U.S. PAYERS CHAMPION BIOSIMILARS?

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**OBJECTIVES:** U.S. healthcare spending on high-cost biologics has escalated over the past decade. The Biologics Price Competition and Innovation Act allows for biosimilar products in the United States, which will be lower-cost alternatives to reference biologics. This study explored payer attitudes to the reimbursement and adoption of biosimilars in the United States. **METHODS:** Some 61 U.S. medical or pharmacy directors at managed care organizations (MCOs) were surveyed during 2014 regarding their expectations for biosimilar reimbursement. **RESULTS:** Respondents indicate that MCOs expect biosimilars to offer a significant discount to the reference brand to secure reimbursement. A mean discount of 23–24% is considered adequate for reimbursement, while 33–34% is deemed necessary for preferential reimbursement to the reference brand. Rapid formulary inclusion of biosimilars is expected, with 79% of respondents indicating formulary inclusion within 12 months of launch. Widespread reimbursement of biosimilars in extrapolated indications is, however, uncertain, with only 34% of respondents reporting that their MCO would unconditionally reimburse a biosimilar under such circumstances. Payers expect to employ various strategies to promote biosimilar uptake, from favorable tiering to step-therapy requiring biosimilar prescribing prior to the reference brand. The most conducive uptake strategies are expected for products with deep discounts. In addition, payers will run educational campaigns for physicians. However, ≥80% of respondents say their biosimilar approach will likely be influenced by thought-leading physicians and medical associations. Furthermore, widespread “grandfathering” is expected, i.e. continuation of the reference brand in responsive/stable patients. **CONCLUSIONS:** U.S. payers will preferentially promote biosimilars over reference brands using various demand- and supply-side measures, so long as biosimilars meet their discount expectations and have clinical stakeholder buy-in. Payers clearly seek to realize the cost savings biosimilars offer; however, tendency to seek clinical stakeholder buy-in, coupled with likelihood of extensive “grandfathering”, indicates some need for more robust evidence of cost-effectiveness.

#### PHS103

##### ARE GENERIC MEDICINES GOOD FOR MY PATIENTS? FINDINGS FROM A QUALITATIVE ASSESSMENT OF PERCEPTIONS AMONG MEDICAL SPECIALISTS IN MALAYSIA

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**OBJECTIVES:** Medical specialists have an essential role in promotion of generic medicines. However, misconceptions and negative perceptions about generic medicines among them could be a major barrier to utilization of generic medicines. Therefore, the aim of this study was to explore their knowledge, perceptions and views about generic medicines. **METHODS:** A qualitative methodology was adopted in this study. A qualitative descriptive (QD) study with phenomenology overtones was the research strategy. Face-to-face semi-structured interviews were conducted with a purposive sample of medical specialists until saturation of data was achieved. The interviews were audio taped and transcribed verbatim. Then, the subsequent transcripts were analysed using thematic analysis. The themes were generated using both deductive (theoretical) and inductive coding. To ensure reliability of data analysis, peer review and independent analysis of the data was done. **RESULTS:** Five major themes were identified: (1) factors affecting specialists' prescribing practice with regards to generic medicines and original brand medicines, (2) specialists' perceptions of efficacy, safety and quality of generic medicines, (3) specialists' knowledge and confidence with Malaysian generic regulatory approval system, (4) drug information sources used by the specialists and (5) international non-proprietary name (INN) prescribing. **CONCLUSIONS:** The study findings showed that several factors influenced prescribing decision with regards to the brands of the medicines including familiarity and experience with generic medicines, medical and clinical condition of the patient, availability of the medicine brand in the hospital and department financial allocations. Moreover, misconceptions about quality, safety, efficacy and bioequivalence of generic medicines were prevalent among the participants. Furthermore, the participants were not familiar with the Malaysian generic medicines approval system. Therefore, medical specialists' concerns need to be addressed. Some recommendations and suggestions were made to improve generic medicines utilization in the country.

#### PHS104

##### PROTON PUMP INHIBITOR PRESCRIBING TREND IN THE US AMBULATORY SETTING

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**OBJECTIVES:** The study aimed to examine the utilization patterns of Proton Pump Inhibitors (PPIs) among the elderly and the trends in PPI prescribing across physician specialties in US office-based settings. The study also evaluated various patient and physician-level factors affecting non-indication based PPI prescription in the above population. **METHODS:** This retrospective cross-sectional study used 2002–2010 National Ambulatory Medical Care Survey (NAMCS) and outpatient portion of the National Hospital Ambulatory Medical Care Survey (NHAMCS) data to evaluate PPI utilization patterns based on patient visits. PPI prescribing trend among different physician specialties was estimated using 2005–2010 NAMCS data. Evidence-based indications for PPIs included the US Food and Drug Administration (FDA) approved indications and the National Institute of Clinical

Excellence (NICE) guidelines. Multivariable logistic regression was performed to examine the association between non-indication based PPI use and various patient and physician-level characteristics using 2008–2010 NAMCS data. **RESULTS:** The use of PPIs increased from 5.29% patient visits in 2002 to 11.82% in 2010 ( $p < .0001$ ). Prescription of PPI without an appropriate indication by primary care physicians (54.26% to 48.84%), medical specialists (35.21% to 35.62%) and surgeons (10.52% to 15.53%) did not change significantly between 2005–2010 ( $p = 0.55$ ). Additionally, 80.12% of patient visits involved PPI prescriptions without an appropriate indication. Results of multivariable logistic regression revealed that, patients with more than 3 chronic conditions were significantly more likely to be prescribed a PPI without an appropriate indication as compared to patient visits without a chronic condition (Odds Ratio (OR) = 2.49, 95% Confidence Interval (CI): 1.26–4.94). **CONCLUSIONS:** PPI use among the elderly increased significantly over the study period, with 8 out of 10 patient visits involving PPI prescriptions without an appropriate indication. Additionally, the study found no change in PPI prescribing trend across physician specialties. These findings suggest the need to improve quality of PPI prescribing in the vulnerable elderly population.

#### PHS105

##### IMPORTANCE OF JOINT WORK BETWEEN PHARMACIST AND PHYSICIAN IN THE RATIONAL DRUG USE IN PATIENTS WITH OSTEOPOROSIS,

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**OBJECTIVES:** to estimate the tangible savings generated when there is a joint effort between Pharmacist and Physician. **METHODS:** observational descriptive study. Population: patient records belonging to an IPS Bogota, diagnosed with Osteoporosis in parenteral drug therapy with bisphosphonates (Zoledronic Acid 5mg Ibandronic Acid 3mg). Observation period: June 2012 to June 2013 (n=161). The Pharmacist identified patients with non-pertinence to parenteral bisphosphonate. Non-pertinence was defined when: the patients had osteopenia (no additional risk factors), had renal function <35 ml/min, no previous scaling with oral medications and when were men with diagnosis of osteoporosis. Finally, the Physician defined the behavior to follow (changing drug therapy). Analysis: were used absolute and relative frequencies, measures central tendency and dispersion. Treatment direct costs were quantified before and after assessment by the Pharmacist and the Physician. The statistical software SPSS 21 license under the CES University was used. **RESULTS:** pharmacist non-pertinence identified in 34% (54/161) of patients, of which, the Physician agreed in 70% of cases (38/54). The 39% of patients switched to oral bisphosphonates (Calcium Alendronate 70mg, Strontium Ranelate 2mg, Risedronate 35mg), 40% Calcium and Vitamin D3 and 21% left without medication. Given that patients were pretreated with Zoledronic Acid 5mg (25/38) or Ibandronic Acid 3mg (13/38), this conduct involved a decreased 18% a year later, with savings/year \$ 9,164 (considering only the value of the drugs). **CONCLUSIONS:** the joint work between Pharmacist and Physician showed an important saving in rational use of medicines.

#### PHS106

##### INCIDENCE OF POLYPHARMACY AMONG EMERGENCY PATIENTS AT A TERTIARY CARE HOSPITAL IN KARACHI: AN IGNORED PARADIGM FOR QUALITY DRUG THERAPY

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**OBJECTIVES:** To estimate the incidence of polypharmacy and its strength of association with respect to medication regimen among patients (pediatric and adults) visiting ED of a tertiary care hospital in Karachi Pakistan. **METHODS:** Retrospective data was collected of all patients, who visited the Emergency Department (ED) of Aga Khan University Hospital, Karachi (AKUH) during January, 2012 to December, 2012. The detailed clinical records on medication prescribing from admission through discharge of all patients was reviewed. **RESULTS:** Total 51,000 patients visited ED during January 2012 till December 2012, out of those polypharmacy was common in 40% of patients. Male were 56.6% (9,837) while 43.4% (7,553) were females. Pediatric patients were 17.9% (3,145) while 79% (14,279) were adults. The most common triage category for patients was P3 with 37.2% (6,483). Most of these patients were those who were recommended admission in other wards 59.6% (10,146), 26.5% (4,514) discharged patients and 9% (1,536) leave against medical advice (LAMA) patients. **CONCLUSIONS:** The perils and problems associated with Poly pharmacy are a subject of interest as polypharmacy was significant finding among all ED patients. The results from this study serves as a baseline to identifying the drug-related problems among EP and could helpful for pharmacists and physicians to develop and implement strategy for risk management in tertiary care hospital. **Keywords:** Polypharmacy, Emergency Department, Emergency patients.

#### PHS107

##### PREVALENCE AND DETERMINANTS OF LOW-COST GENERIC DRUG PROGRAM USE IN THE PRIVATELY-INSURED ADULT POPULATION

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**OBJECTIVES:** Low-cost generic drug programs (LCGPs) offer an affordable way for individuals to obtain a wide variety of prescription drugs, but they may lead to exposure misclassification in administrative claims datasets. This study sought to assess the prevalence and determinants of LCGP use in a privately-insured adult population. **METHODS:** This study relied on data from the Medical Expenditure Panel Survey from 2005 – 2011. LCGP use was defined by two stipulations 1) The total cost of the drug was paid out of pocket and 2) The cost of the drug exactly matched the cost of an LCGP program. Demographics of LCGP users and non-users were compared. A multivariable logistic model was estimated to identify the determinant variables associated with LCGP use. **RESULTS:** Of the total study